

**PATENT APPLICATION**  
**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**  
**BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re application of

Docket No: Q77694

Masayoshi SAWAI

Appln. No.: 10/669,644

Group Art Unit: 2123

Confirmation No.: 4448

Examiner: Mary JACOB

Filed: September 25, 2003

For: METHOD OF ASSISTING WIRING DESIGN OF WIRING STRUCTURE, ITS  
APPARATUS AND ITS PROGRAM

**REPLY BRIEF PURSUANT TO 37 C.F.R. § 41.41**

**MAIL STOP APPEAL BRIEF - PATENTS**

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Sir:

In accordance with the provisions of 37 C.F.R. § 41.41, Appellant respectfully submits  
this Reply Brief in response to the Examiner's Answer dated January 3, 2008. Entry of this  
Reply Brief is respectfully requested.

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**STATUS OF CLAIMS**

Claims 1-8 are pending and are the basis of this Appeal. Claims 1-8 stand rejected.

**GROUND OF REJECTION TO BE REVIEWED ON APPEAL**

Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kodama et al (US Patent 6,961,683) in view of Neul et al (“A Modeling Approach to include Mechanical Microsystem Components into the System Simulation”, Proceedings of Design, Automation and Test in Europe, pages 510-517, 23-26 February, 1998) and Peterson et al. (“Application of Dynamic System Identification to Timber Beams”, Journal of Structural Engineering, April 2001, pages 418-425).

**ARGUMENT**

In addition to the arguments set forth in the Appeal Brief filed October 11, 2007, Appellant responds to certain points made in the Examiner's Answer as follows:

As noted in the Appeal Brief, the Examiner appears to broadly construe the claimed limitation related to the elastic body having a circular cross section as well as the linearity of the plurality of beams being maintained to read on the combined teachings of Kodama, Neul and Peterson.

In response to the Appellants arguments, the Examiner maintains that a skilled artisan would interpret "linear" to be directed to something resembling a straight line. The Examiner admits that Kodama does not expressly disclose that the linearity of beam elements are maintained<sup>1</sup>. However, the Examiner maintains that Neul suggest the modeling of a mechanical device using beam elements for linear systems where the linearity of the beam elements are maintained. Specifically, the Examiner refers to page 514 col. 2, last paragraph to page 515 col. 1, lines 1-3.

However, in these passages, there is a general suggestion that in the finite element analysis, "linear systems" are used, and therefore displacements can be added. This teaching (or suggestion) can at best be considered to be a general suggestion for "linear systems" in the context of MEMS. More specifically, in the passages referred to by the Examiner, cantilever beam elements are discussed. The Appellants are by no means contending that "linear systems" in general were not known or not suggested. However, there is clearly no suggestion in Neul for considering the wiring

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<sup>1</sup> Page 8, lines 12-18 of Examiners Answer

structure of a harness as plurality of beam elements that are connected with the linearity of the beam elements being maintained. Clearly, by Examiner's own admission, Kodama does not suggest linearity being maintained. Neul, at best, has general teaching on linear systems, far short of overcoming the deficiency in Kodama.

Further, the Examiner compares Figs. 1 and 3 of the present Specification with the figures 1 and 8 of Kodama, in an alleged attempt to establish that "linearity," in so far as these figures are concerned, are no different from what is allegedly disclosed by Kodama. In other words, the Examiner appears to be arguing that these figures in the present Specification do not disclose "linearity" as interpreted by the Examiner. However, the Examiner is believed to be mischaracterizing the requirements for establishing obviousness. The present Specification clearly shows the intended meaning of the term "linearity." For example, Figs 4 - 5 and the accompanying description clearly demonstrate that the linearity of the plurality of beams is maintained. The fact that Figs. 1-3 do not appear to show linearity, as per the Examiner's understanding of the term, is believed to be of little relevance to the interpretation of the term "linearity." Comparing individual figures in the present Specification and Kodama in isolation, as the Examiner appears to be doing, is believed to be incorrect and of little relevance to the interpretation of the claims.

Accordingly, Appellant respectfully submits that claims 1-8 would not have been obvious over the combined teachings of Kodama, Neul and Peterson because the cited reference does not teach or suggest all of the features of the claims.

In view of the foregoing, Appellant respectfully submits that the rejection of claims 1-8 should be reversed.

**CONCLUSION**

For the above reasons as well as the reasons set forth in Appeal Brief, Appellant respectfully requests that the Board reverse the Examiner's rejections of all claims on Appeal. An early and favorable decision on the merits of this Appeal is respectfully requested.

Respectfully submitted,

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